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## NEW SYRPHIDÆ FROM CENTRAL AMERICA AND THE WEST INDIES

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Since the publication of my synopsis of the Volucellinæ,<sup>1</sup> six additional species have come to hand and are among the new forms characterized in the following pages. Identification of these should not be difficult as they are compared with the species to which they trace in the key. I am greatly indebted to Dr. Joseph Bequaert for his generosity in donating the types of new species, from his collection, to The American Museum of Natural History.

### **Megametopon violacea**, new species

Readily distinguished from *nasicum* Williston by its greenish abdomen with brilliant violaceous opalescence. Length, 8 to 9 mm.

MALE.—Head varying from waxy brownish yellow to reddish yellow, the occiput black in ground color; cheeks brownish posteriorly and with a black or brown stripe extending from the eye to the oral angles. Pile whitish with yellow tinge, the upper fourth of the front with scattered black hairs except in the middle. Antennæ brownish red; arista brown on apical half.

Mesonotum green, with strong violaceous opalescence, the sides broadly brownish. Scutellum blue-black, its disc dull. Pleura greenish black, the prothorax, a broad band extending from the base of the wing to the middle coxæ and the hypopleura, yellowish. Pile cinereous, short, dense anteriorly; mesonotum behind with longer yellow pile, a row of fine bristles and some scattered black hairs; bristles of thorax black.

Coxæ brown, pale pilose. Femora broadly brown or black basally and on almost their whole length in front, reddish apically; tibiæ black or dark brown, their bases broadly dull reddish; tarsi brown, the posterior four becoming paler basally, the anterior pair black. Pile black; yellow on the posterior surface of the anterior four femora and on the posterior pair except dorsally and on the broad apex.

Wings tinged with brown or yellowish brown, especially along the veins, rarely hyaline posteriorly and in the cells of the apical half of the wing. Squamæ grayish white, the fringe mostly black. Knob of halteres white.

Abdomen green, brilliantly violaceous in some lights; first segment and more than the basal third of the second on the median two-thirds, reddish yellow, and often with a less conspicuous, roundish spot toward either side in the green field. Pile short and whitish, the apical third of the second and third segments with black pile

<sup>1</sup>American Museum Novitates No. 413.

except laterally. Venter with the basal half yellowish, the apical half black, and wholly pale pilose. Genitalia brown, thinly pollinose, black-haired.

**FEMALE.**—Front moderately wide, rather gently widening from vertex to face; upper brown orbital spot opposite the antennæ absent; antennæ situated only a little below the middle of the eyes; a broad band of black pile across the ocellar region; face perpendicular below the tubercle.

**TYPES.**—Holotype, male, allotype, female, and nine male paratypes, Chichen Itza, Yucatan, Mexico, June, 1929, (J. Bequaert).

There is but one other species in the genus, *nasicum* Williston, known only from Mexico. It lacks black hair on the head and has the abdomen pale-colored. The female differs very markedly from the male in the structure of the head but agrees so well in every other respect that I am placing it here. The antennæ are situated higher than in the female of *nasicum*. The head appears ludicrously broad, being broader than the thorax and very short.

#### ***Copestylum bequaerti*, new species**

Apical two segments of the abdomen ferruginous or reddish; wings luteous on basal half in front of the sixth vein and with a large, deep brown spot beyond the middle. Length, 10 to 11.5 mm.

**MALE.**—Head black, the face broadly reddish yellow on either side. Pile pale brassy yellow, appressed on the face, short and tawny on the eyes; vertical triangle black-haired. Occiput and narrow sides of the face whitish pollinose. Antennæ brown; arista deep black.

Thorax shining black; humeri, posterior calli and scutellum brownish, or at least tinged with brown. Pile black; in front of the suture and on the meso- and sternopleura brassy yellow; scutellum with black pile, the base and a narrow apical border yellow pilose.

Legs black; tips of femora brown; pile black; coxæ pale pilose.

Very broad apex and posterior border of the wing hyaline. The luteous color fills out the whole of the anal cell and extends somewhat into the auxilliary cell. The apical border of the brown spot lies a little beyond the anterior cross-vein and is transverse; the brown color, extending from the costa to behind the fourth vein, forms a broad cloud over the discal cross-vein and extends as a narrow wedge to the basal fourth of the first basal cell. Squamæ luteous, with shining brownish yellow fringe. Knob of halteres white.

Basal two abdominal segments black, the apical two ferruginous; sides of second to fourth segments reddish. Pile white on the first segment; second segment with black pile, on either side with a large subrectangular area of white pile which extends narrowly inward along the base of the segment, forms an acute angle posteriorly at the inner end and is more or less convex on its outer edge; sides broadly golden pilose except basally. Third segment black pilose, the base narrowly white, the sides broadly golden. Fourth segment with sparse yellow pile and with appressed, very short black hairs over almost its whole surface, the sides golden pilose. Genitalia reddish, yellow pilose. Venter shining black, with obscure reddish markings basally and apically on the third sternite; pile black, the second to fourth sternites each with a broad, transverse spot of yellowish pile in the middle.

TYPES.—Holotype, male, and one male paratype, Chichen Itza, Yucatan, Mexico, June, 1929, (J. Bequaert).

In my recently published key to this genus (American Museum Novitates, No. 413) this species will trace to *limbipennis* Williston, but in that species the brown color extends to the apex of the marginal cell, whereas in *bequaerti* it stops near the middle of the discal cell.

### **VOLUCELLA** Geoffroy

Since the publication of the key to the species of *Volucella*, in American Museum Novitates No. 413, some additional material has come to hand, resulting in a further study of some of the forms. I find that I have previously confused two species under *eugenia* Williston and a third related species is before me from the Bahamas. The species in this group may be separated as follows.

1. Mesopleura entirely black-haired. . . . . 2.  
Mesopleura with cinereous yellow pile above. . . . . *watsoni*, n. sp.
2. Scutellum with more than the apical half black-haired. . . . . 3.  
Scutellum yellow pilose, at most a few of the bristly hairs on the margin black.  
*abdominalis* Wiedemann.
3. Notopleura and scutellum wholly black pilose. . . . . *ingenia*, n. sp.  
Notopleura and broad base of scutellum reddish yellow pilose. . *eugenia* Williston.

### **Volucella watsoni**, new species

Abdomen violaceous black; scutellum reddish brown, black pilose. Length, 16 to 19 mm.

MALE.—Head black; face and frontal triangle yellow, pale yellow pollinose; pile pale yellow. Antennæ reddish, the third segment mostly brown, rather kidney shaped; arista black. Face strongly produced downward, moderately concave above, the tubercle low and over one-fourth as long as the face.

Thorax black, the sides of the mesonotum broadly brownish red. Pile of the mesonotum and upper half of the mesopleura cinereous yellow; pleura, posterior calli and scutellum black pilose, the latter without distinct bristles; no prescutellar bristles.

Legs black; tibiæ red on basal three-fourths; pile black.

Wings hyaline; yellowish on the basal half except posteriorly and also along the costa beyond the subquadrate brown spot which extends from the costa over the cross-veins at the middle of the wing. Squamæ and their fringe brown. Knob of halteres white.

Abdomen brownish black or violaceous black, in some lights with violaceous reflections. Pile wholly black. Venter violaceous.

FEMALE.—Middle of front brownish on whole length, the vertex reddish; front wholly brownish yellow pollinose except at the vertex; pile wholly pale yellowish. The front is narrow above and gently widens to the level of the antennæ.

TYPES.—Holotype, male, Port-au-Prince, Haiti, March 5–11, 1922; allotype, female, La Morinière, Haiti, March 1–5, 1922; paratypes, three males, Port-au-Prince, February 2 to 28, 1922, and one male, Pont Beudet, Haiti, March 3–4, 1922. The specimens were all collected by F. E. Watson.

***Volucella ingenia*, new species**

Abdomen steel-blue; scutellum wholly black-haired. Length, 15 mm.

FEMALE.—Head black, the posterior orbits gray pollinose. Face and front brownish yellow, the former yellowish pollinose, the latter with little evidence of pollen. Pile yellowish, on the facial tubercle and at the vertex black. Antennæ reddish, the third segment narrowed on apical half; arista with black apex and rays. Face strongly produced downward, moderately concave above, the low tubercle more than one-fourth as long as the face. Eyes with short white pile.

Thorax black, the sides and scutellum reddish brown. Pile black, yellow on the mesonotum in front of the suture and also immediately in front of the scutellum.

Legs black; tibiæ reddish with the apical fifth or less brown; pile wholly black.

Wings pale orange on almost the basal half in front of the sixth vein and on the whole length in front of the second vein; the median cross-veins broadly clouded with brown, the longitudinal veins on the apical half of the wing from the fourth to the sixth margined with brown except apically. Squamæ and fringe blackish. Knob of halteres white.

Abdomen steel-blue, with violaceous reflections in some lights, wholly black pilose.

HOLOTYPE.—Female, Gibson Cay, Mangrove Cay, Andros Island, Bahamas (J. Bequaert).

***Volucella feminina*, new species**

Related to *unipunctata* Curran but the legs are black, the tarsi reddish yellow basally. Length, 5 mm.

FEMALE.—Head black, sides of face very broadly whitish yellow; the pale color occupies the sides of the face between the orbits and base of antennæ and tapers below, not reaching the oral margin; it is continued much less narrowly along the orbits to above the middle of the front; cheeks with a narrow reddish stripe across the middle from eye to oral margin. Pile yellowish white; black on the upper fourth of the front. Occiput cinereous pollinose. Face perpendicular, strongly produced downward; below the middle with a low tubercle which is receding from near its upper end to the oral margin. Antennæ brown; third segment regular in outline; arista luteous, with black apex and rays.

Thorax shining black; humeri, notopleura, a small spot above the front coxæ and a transverse, oval spot in front of the scutellum, whitish yellow. Pile pale yellowish, on the mesonotum intermixed with black and becoming wholly black on the posterior fourth. Scutellum translucent brownish yellow, on either basal corner with a rather oval whitish-yellow spot; pile black, abundant, pale yellow on the narrow base and the sides basally.

Legs black, with abundant black pile. Basal two segments of the tarsi reddish yellow and with similarly colored pile.

Wings cinereous hyaline with pale brown fasciæ; the basal fascia extends over the cross-veins at the apex of the second basal cell to the fork of the third vein; the second

fascia extends back from the apex of the first cell to the posterior end of the posterior cross-vein; the third fascia fills out almost the apical fourth of the wing, becoming paler apically and extending broadly as a grayish cloud along the whole posterior border of the wing. Marginal cell strongly bulbous apically. Squamæ grayish white, with whitish fringe. Halteres white.

Abdomen shining black, the third segment with a pair of large, poorly defined reddish spots. Pile rather short, white; black on the posterior half of the second segment; partly brown on the reddish spots. Venter shining black and clothed with black pile.

HOLOTYPE.—Female, Chichen Itza, Yucatan, Mexico, June, 1929, (J. Bequaert).

### ***Volucella ernestina* new species**

Bright green, including the face; scutellum with preapical depression; no prescutellar row of bristles; fourth abdominal segment mostly brownish-yellow pilose. Related to *ernesta* Curran from which it differs in having longer black hairs intermixed with the yellow pile on the mesonotum. Differs from *viridana* Townsend in having the fourth abdominal segment pale pilose. Length, 8 mm.

MALE.—Head green, cheeks with a brownish-red triangle extending from the oral margin to the orbit. The grayish occipital pollen has a brownish tinge; a broad band of white pollen across the facial depression, the lateral margins of the face similarly pollinose. Pile fine, white; black on the middle of the face and on the vertical triangle. Face strongly produced downward, deeply concave above, with a strong tubercle a little below the middle, its most prominent point on a level with the lower border of the eyes, below the tubercle perpendicular. Antennæ reddish brown; third segment with parallel sides on apical two-thirds, rounded apically; arista luteous, with black rays and apex. Pile of eyes fine, whitish, rather short and not dense.

Thorax green; mesonotum, except on the sides in front, somewhat dulled and with conspicuous opalescence. Humeri brownish. Pile rather tawny, on the pleura paler, on the mesonotum with longer black hairs intermixed; scutellum with black pile laterally and with black marginal bristles, dulled except on its free border. There is some black pile on the pteropleura.

Legs black; tarsi brown, obscurely reddish basally; femora green beneath; pile wholly black.

Wings hyaline, the veins all bordered with yellowish brown; a small darker spot at the base of the stigma; marginal cell petiolate, convex apically and scarcely widened. Squamæ grayish, with brownish border and fringe. Halteres white.

Abdomen brilliant green, with slight coppery reflections in some lights. Pile white on first segment and basal half of second except laterally; from lateral view the pile on the rest of the abdomen appears obscure tawny, from dorsal view it appears more yellowish; on the lateral margins there are black hairs intermixed and these are conspicuous near the base of the second segment. Venter pale pilose, the apical third and genitalia with black pile.

HOLOTYPE.—Male, Chichen Itza, Yucatan, Mexico, June, 1929, (J. Bequaert).

### ***Microdon apiculus*, new species**

Belongs to the sub-genus *Ubristes* Walker. Differs from *micromidas* Shannon in having black legs and thorax. Length, 8 to 9 mm.

MALE.—Head black, the sides of the face very broadly yellowish white, almost stramineous laterally, the median black vitta tapering below. Face narrow, widest

just below the antennæ, whitish pilose; in profile gently receding below, almost straight. Front narrow below, widening to the vertex, the depression moderately deep, the upper section of the front swollen; ocellar triangle longer than broad, swollen, situated at the middle of the upper section of the front; hair rather short, erect, abundant, black. Occiput with yellowish-white hair on lower half, and more abundant black hair above. Eyes bare. Labellæ bright orange. Antennæ brown, longer than the head, the third segment one-eighth longer than the first; arista slender, shorter than the first segment.

Thorax shining black, a large spot on the sternopleura above and an indefinite area above the front coxæ yellowish brown. Pile black, an undulate anterior band on the mesonotum, a small spot at the inner ends of the suture, a very broad prescutellar band and the scutellum wholly, golden-reddish pilose. Scutellum short, shallowly and narrowly emarginate at the apex, leaving a pair of small tubercles.

Legs shining black; the apical two segments of the tarsi reddish; pile black; on the dorsal surface of the tibiæ, white on basal half or less, long on the posterior tibiæ and tarsi.

Wings tinged with blackish brown; beyond the end of the subcostal vein with an elongate, rectangular paler area which is more conspicuous in the female, the veins within this area yellowish. Squamæ and halteres brown, the base of the latter orange.

Abdomen strongly narrowed and tapering beyond the second segment; orange or rusty reddish, with short yellow pile, the sides of the basal two segments black pilose, a basal triangle on the sides of the fourth segment whitish pilose. Genitalia small, rather ferruginous.

FEMALE.—The front widens gently from opposite the anterior ocellus to the base of the antennæ and the frontal depression is less impressed. Fifth abdominal segment brown dorsally, the ovipositor brown with yellow apex. The pale spot on the wing is a little whitish in some views and extends back as far as the fourth vein and along the costa to a point only a little before the stump of vein in the apical cell.

TYPES.—Four specimens from Barro Colorado Island; holotype, male, January 7, 1929; allotype, female, February 13, 1929; paratypes, two males, January 5 and 10, 1929, (Curran).

This species very closely resembles certain bees of the genus *Trigona*. All the specimens were taken along the trails: two on Lutz trail, near the laboratory, one on Snyder-Molino trail, and one on Wheeler trail, near its junction with the last mentioned.

#### ***Microdon panamensis*, new species**

A small species with strongly elevated, deeply sulcate scutellum, the abdomen of the male mostly blackish, of the female mostly pale orange. Antennæ very long. Length, 7 to 8.5 mm.

MALE.—Head brownish black, the face yellow on more than each lateral third, the yellow ground meeting above the oral margin; facial pile very short, appressed, brassy yellow, the sides of the face narrowly white pollinose; face widening very slightly on the lower half. Front slightly narrowing to the vertex; no distinct frontal depression, but the upper section strongly convex and with the ocellar triangle, which

is wider than long, lying mostly before its middle; front with thin brownish pollen and appressed, very short, golden hair except on the ocellar triangle and a small orbital triangle occupying the lower fourth of the upper section; ocellar triangle not at all swollen, a shallow groove extending from the anterior ocellus to the anterior edge of the upper section. Occiput with thin cinereous pollen which becomes brownish yellow above, the pile short and white below, reddish or tawny toward the vertex. Antennæ brown, the third segment a little more than one-third longer than the first, narrowed apically, the second short, but little longer than wide; arista about three-fourths as long as the first segment.

Mesonotum rather dull brownish black, with very short closely appressed black hair; golden hair forming three bands, the anterior one situated on the anterior margin, interrupted, the median one narrowest and entire, posterior band widest, situated on the posterior border, irregularly margined in front. Humeri and scutellum orange, the latter rather dulled apically by the very short, appressed reddish-yellow hair, the apical border with coarser black hair, its apex with a very deep impression which leaves a large, mammiform process on either side, the scutellum directed obliquely upward. Pleura shining blackish-brown with a band of silvery pile extending from the notopleura to the middle coxæ.

Legs shining blackish, the apical fifth of the anterior four tibiæ obscurely reddish; tarsi reddish except the basal segment of the posterior pair, the basal segment with a small basal tubercle beneath and grooved for the reception of the following segment in repose, the second segment more or less carinate beneath. The brownish coxæ bear thin gray or whitish pollen and short, appressed white hair; tarsi with short yellow hair, the first segment of the posterior pair black-haired above; hair of femora and tibiæ extremely short and appressed, the femora little swollen, all the tibiæ gradually increasing in size from base to apex.

Wings cinereous hyaline, the cross-veins bordered with brown; apical cross-vein transverse, an appendage at its posterior end. Squamæ whitish, with narrow brown border and fringe. Halteres yellow.

Abdomen brownish black, with yellow markings. Second segment on either side with a large pale triangle which is continuous with a broad pale vitta on the third segment, the very broad apex of the third segment, except at the sides, yellowish, the base more or less yellow; fourth segment with the posterior border broadly yellow. Pile very short, golden yellow, on the fourth segment less abundant and more brassy. Second to fourth sternites brownish yellow with pale-yellow apices.

**FEMALE.**—Front a little wider. Scutellum with black hair only. Tibiæ considerably more swollen, the anterior four reddish apically. Wings more nearly hyaline, the veins mostly reddish yellow. Abdomen orange, the lateral margins brownish except on the apical half of the fifth segment, the brown part with black hair. Venter reddish yellow. Tip of ovipositor black.

In the male the second abdominal segment is elongate, being almost as long as the third and fourth together, and it is not greatly widened apically where it is, however, almost as wide as the third segment. This gives an elongate, subcylindrical appearance to the abdomen. In the female the abdomen is much more oval, the second segment strongly widening from the base to the apex and much shorter than the third and fourth segments combined. Another unusual character is the very marked differentiation of the abdominal sutures, with no indication of fusion.

**TYPES.**—Holotype, male, allotype, female France Field, January 18, 1929. (Curran); taken in coitu.

***Microdon solitaria*, new species**

Metallic bluish-green; legs green, tibiae white-haired, scutellum armed. Length, 10.5 mm.

**FEMALE.**—Face rather narrow, with almost parallel sides, the pile long and whitish and continuing along the orbits to the lower fourth of the front. Front black pilose, with almost parallel sides on upper three-fourths, rather strongly widening below, the depression obsolete or very weak, ocellar triangle small, longer than wide, strongly convex, situated a little behind the middle of the front. Occiput whitish pilose. Proboscis brown. Eyes bare. Antennae elongate, black, the third segment one-fifth longer than the first, cylindrical, with a narrow groove along the outer side, first segment more or less metallic green above and below. Arista black, about as long as the first segment.

Thorax with moderately long, fairly sparse whitish hair, the disc of the mesonotum with black hair intermixed. Scutellum broadly and shallowly concave apically, a strong, brown-tipped spine on either side of the concavity, the sides gently convex.

Legs metallic green or blue; tarsi brown with the apical segment reddish; pile yellow on the femora, silvery white on the tibiae, black on upper surface of basal three segments of the posterior tarsi.

Wings cinereous hyaline or tinged with brown, the cross-veins bordered with brown. Apical cross-vein straight, recurrent, with a short appendage at the posterior end.

Abdomen with whitish pile, the third and fourth segments each with a very large, oval oblique spot on either side which fuse anteriorly in the middle and are united with a broad median vitta, the fifth segment black haired except the broad basal corners. Tip of ovipositor red. Second segment in the middle not longer than the first, convex laterally, without sublateral depressions, the shape as in *tristis* Loew.

**TYPES.**—Holotype, female, Barro Colorado Island, January 3, 1929; paratype, female, February 13, 1929, (Curran).

***Callostigma panamensis*, new species**

At once distinguished from *elnora* Shannon by the absence of the blackish spot at the apex of the wing. Yellowish, with black markings. Length, 5.75 mm.

**FEMALE.**—Face perpendicular, strongly receding below the tubercle, yellow, with very fine, sparse yellow pile. Front yellow, the upper fourth, a median vitta reaching more than halfway to the antennae and a small spot on the lunula, shining black, the pile black except on the sides of the lower half; ocellar triangle longer than wide. Occiput blackish, densely cinereous pollinose, toward the vertex with yellow pollen; pile pale yellow. Third antennal segment wider than long, subquadrate, narrowly brown above; arista brown, longer than antenna.

Thorax yellow, the median three-fifths of the mesonotum bronze-black, with three grayish-yellow pollinose vittae, none of which reach the posterior margin, the lateral ones shorter, wider and somewhat diverging posteriorly. Metanotum, a spot on the metapleura and another in front of the posterior coxae, shining black; an obscure, ferruginous spot in front of either middle coxa. Pile yellow, the pleura bare, scutellum with reddish tinge dorsally and a few black hairs apically.

Legs yellow, tarsi reddish yellow; pile wholly yellow. Wings cinereous hyaline; apical cross-vein transverse, with short appendage at its posterior end; posterior

cross-vein oblique on anterior half. Squamæ yellow with brownish tinge. Halteres reddish yellow.

Abdomen pale orange with black markings. First segment yellow with the apex broadly black except at the sides. Second segment with the posterior fourth, an incomplete, narrow fascia on the basal fifth and indications of a slender median vitta, blackish or brown, the median vitta in front of the anterior fasciæ broad and distinct. Third segment with the posterior fifth, a median vitta and a rectangular spot on either side forming a production of the posterior fascia and produced forward from its inner end to the basal third of the segment, blackish; fourth segment in general with similar markings but the posterior fascia is sub-interrupted leaving the lateral rectangular spots more conspicuous and they are longer and more broadly produced forward. Fifth segment with three black vittæ, the outer ones broad and gently concave on their outer edge. Sixth segment with the posterior border narrowly, triangularly produced toward either side and an entire median vitta blackish. Pile short, appressed, black, yellow on the base and lateral margins.

HOLOTYPE.—Female, Barro Colorado Island, January 9, 1929, (Curran).

Differs from *hyalipennis* Curran in having the posterior cross-vein straight and oblique, an oblique black band on the pleura posteriorly, wholly black sixth abdominal segment, etc.

#### ***Xanthandrus mexicanus*, new species**

Related to *bucephalus* Wiedemann but at once distinguished by the entirely black pilose front in the female. Length, 10 to 11 mm.

FEMALE.—Head silvery pollinose; the tubercle, a small spot on the cheeks, and the front, shining black; frontal orbits with a large pollinose spot at the lower third, these sometimes obscurely joined in the middle, but in most lights appearing broadly separated. Pile white, on the front and middle of the face above, black. Antennæ brownish red, the third segment black on more than the upper half; arista luteous.

Thorax shining black; pleura, notopleura and humeri cinereous white pollinose and white pilose, the dorsum cinereous pilose; scutellum bordered with blue. The tubercular swellings inside the notopleura are strongly developed.

Legs black; tips of the femora and narrow base of the posterior tibiæ reddish; basal third or less of the anterior and the basal half and apex of middle tibiæ yellow. Pile black; whitish on the posterior coxæ, basal half of the posterior femora and the posterior surface of the middle femora.

Wings cinereous hyaline, stigma bright luteous. Squamæ and their fringe whitish, the margin yellow; halteres yellow.

Abdomen shining bluish-black, the second and third segments mostly opaque. Third segment with a pair of basal, broadly separated, orange spots which are convex posteriorly, broadly separated from the lateral margins and reach to the middle of the segment, the space between them blue; fourth segment with a transverse basal orange triangle on either side but these are sometimes much reduced; posteriorly with a broadly interrupted, subopaque or bronzed fascia, the inner ends of the spots convex, the outer ends produced forward. Basal two-fifths of the second segment, the broad lateral borders of the second to fourth and the apex of the fourth always shining. Pile black, appressed, on the base of the abdomen, broad sides of the second segment and basal half of the sides of the third and fourth segments narrowly, whitish.

Types.—Holotype, female, and two female paratypes, Chichen Itza, Yucatan, Mexico, June, 1929, (J. Bequaert).

In all the females of *bucephalus* which I have seen there is a pair of large orange spots on the second abdominal segment and the basal third of the front is white pilose except for scattered black hairs on the antennal tubercle. I believe that *Melanostoma ?eucephalus* Bigot, from Colombia, is the same as *bucephalus*, the description agreeing with males of that species.

### *Ceriogaster panamensis*, new species

At once distinguished from the described species by the presence of a large, orange prescutellar triangle on the mesonotum.<sup>1</sup> Length, about 8 mm.

MALE.—Frontal triangle and face shining yellowish pollinose, a broad, median facial vitta shining black; cheeks brown; occiput pale yellowish pollinose below, becoming brownish yellow above, the pile yellow, the short, spine-like occipital cilia black. Vertical triangle dull black with yellow pollen in front and behind, the pile yellow with a black band across the ocelli. Pile of frontal triangle fine, yellowish. Antennæ brownish red, the third segment mostly brown; arista brown apically.

Mesonotum dull black, finely scrobiculate, with reddish-yellow pollinose fasciæ anteriorly and across the suture, both broadly interrupted in the middle, on the posterior border with a large, triangular orange spot. Hair extremely short, black, the pale markings, with the exception of the anterior fascia, without pile, the hair on the anterior band and humeri pale yellowish or mixed black and yellowish. Scutellum orange pollinose, with short, coarse hairs on the margin and a few scattered ones on the disc, the basal corners dull blackish. Pleura with rather thin silvery-gray pollen and with short, fine silvery-gray pile.

Coxæ silvery-gray pollinose and pilose. Femora shining black or brown, with short, whitish pile, the posterior pair strongly swollen and with short, stout bristles ventrally except toward the base; apices of femora reddish. Tibiæ brown with the basal third or more and their apices, reddish, the posterior pair with small black tubercles on the ventral surface. Anterior tarsi black, broadened and flattened, the posterior four reddish or reddish yellow with the apical one or two segments darker.

Wings strongly tinged with blackish brown, the subcostal cell wholly dark brown. Squamæ brown. Halteres yellow.

Abdomen black, the basal three segments opaque or subopaque dorsally, metallic on the very broad lateral margins, the first and second steel-blue, the third brassy, the fourth wholly brassy. Pile short, brassy yellow, very short and black on the first two segments and a large posterior triangle on the third, the sides pale pilose. Venter pale pilose; genitalia brownish with whitish pile, thinly pollinose.

HOLOTYPE.—Male, Barro Colorado Island, January 10, 1929, (Curran).

#### <sup>1</sup>*Ceriogaster fascithorax* Williston

*Ceriogaster foscithorax* (error) WILLISTON, 1888, Trans. Amer. Ent. Soc., XV, p. 286.

*Ceriogaster fascithorax* KERTESZ, 1910, 'Cat. Dipt.', p. 308.

*Ceriogaster fuscithorax* SHANNON, 1926, Proc. U. S. N. M., LXIX, Art. 9, p. 50.

I base the spelling of the name for this species upon the label which Williston placed upon one of the specimens and, since the thorax is fasciate, there is no reason to doubt but that the name was intended to describe this condition. I believe we are justified in making this correction in spelling in this case, even though Williston never corrected the error.

***Meromacrus panamensis*, new species**

Related to *acutus* Fabricius but the brown of the wings extends in the subcostal cell and anterior half of the first basal cell quite to the base of the wing and the male genitalia are very different. Length, about 16 mm.

**MALE.**—Face yellow with a broad median black vitta, the sides whitish pollinose and thickly rich yellow pilose; frontal triangle black, the sides broadly whitish pollinose and clothed with pale yellowish pile. Cheeks brown, thinly pale pollinose. Occiput black in ground color, whitish pollinose and densely rich yellow pilose; vertical triangle black, cinereous white pollinose in front, black pilose; no black occipital cilia; frontal triangle with sparse black hair in middle. Antennæ brown; arista brownish red, becoming pale yellowish apically.

Mesonotum dull blackish posteriorly; humeri and a slender median line with steel-blue tinge, the posterior border, a stripe along the suture, and two spots in front, clothed with rich yellowish tomentum. Pleura blackish, the yellow tomentum extending over the posterior third of the mesopleura and forming a large spot on the sternopleura, a silvery pollinose band on the sternopleura behind the yellow spot; pile pale yellowish. Scutellum black, the immediate apical border translucent honey-yellow. Pile of mesonotum and scutellum black except on the pale spots, the humeri and the narrow sides of the scutellum. Spiracles white.

Legs rusty reddish, the posterior femora mostly black, their tarsi mostly brown. Coxæ black, silvery-gray pollinose. Middle femora with the very short black hair extending from base to apex on the posteroventral surface.

Wings hyaline, the anterior border broadly brown, the costal cell hyaline. Squamæ grayish white, the very broad border blackish or dark brown, the fringe yellowish. Halteres yellow.

Abdomen dull blackish, with very short brown pile which gives a brownish sheen in most lights, the second segment with a pair of transverse, anteriorly concave shining subtriangular spots which are broadly separated from each other in the middle and extend over the lateral margin. First segment, behind the basal corners of the scutellum, with a subtriangular spot of bright yellow tomentum, the third and fourth segments each with a broadly interrupted basal band of similarly colored tomentum; apices of segments narrowly waxy yellow. Genitalia wine red with blackish diffusion and thin gray pollen. Pile on sides of abdomen and venter longer and pale yellowish.

**HOLOTYPE.**—Male, Barro Colorado Island, December 23, 1928, (Curran)

